

## **Alternative 4**

Alternative 1 would affect parcels and land uses north of the BNSF Railroad and west of Leary Way. They would be similar to impacts in these areas that would occur with Alternatives 2 and 3. Most of the parcels adjacent to this alternative are under the CC-2, CC-1, and CC-5 zoning designations. Approximately 3.5 acres of land would need to be acquired for this alternative, all of which would be from City Center zoned land. Approximately 46,009 square feet of the King County maintenance shop site parcel would be used by the new roadway. Remaining portions of the parcel, although discontinuous, could be converted to park or open space in conjunction with the BNSF Railroad corridor and the heron rookery parcel.

Under Alternative 4, five buildings would be displaced by the proposed roadway: the Workshop Tavern, A & G Leasing, Redmond Carpet, the abandoned Country Store, and the Thrift Store. Business displacements at Redmond Plaza, as described for Alternative 3, would also occur. Construction impacts would be similar to Alternatives 2 and 3, but would occur in a greater portion of the overall project area because the roadway extension would extend both west and north.

## **Mitigation Measures**

Local residents and businesses would be given advance notification of construction schedules and potential travel delays or disruptions.

Where right-of-way acquisition would be needed from adjacent parcels, the City would work with property owners to minimize disruptions to current land use activities. Property acquisition would be compensated at fair market value.

Dust and noise impacts during construction would be mitigated as described in the *Air Quality* and *Noise* sections.

## **Significant Unavoidable Adverse Impacts**

Where property would be acquired for construction of any of the build alternatives, land would be converted from existing uses to roadway facility uses. This would result in the potential loss of land currently zoned for commercial use in the project area.

## **Hazardous Materials**


This section summarizes information provided in the following reports:

- Camp Dresser & McKee, Inc. (CDM), 2001. *Phase I Environmental Assessment (Phase I EA)*, prepared for the City of Redmond Public Works Department;
- CDM, 2002. *Phase II Environmental Assessment (Phase II EA)*, prepared for the King County Division of Capital Planning and Development, Department of Construction and Facility Management; and
- Farallon Consulting LLC (Farallon), 2002. *Summary of Subsurface Investigation Results and Preliminary Remediation Cost Estimate, City of Redmond – Leary Way Property*, prepared for the City of Redmond Public Works Department.

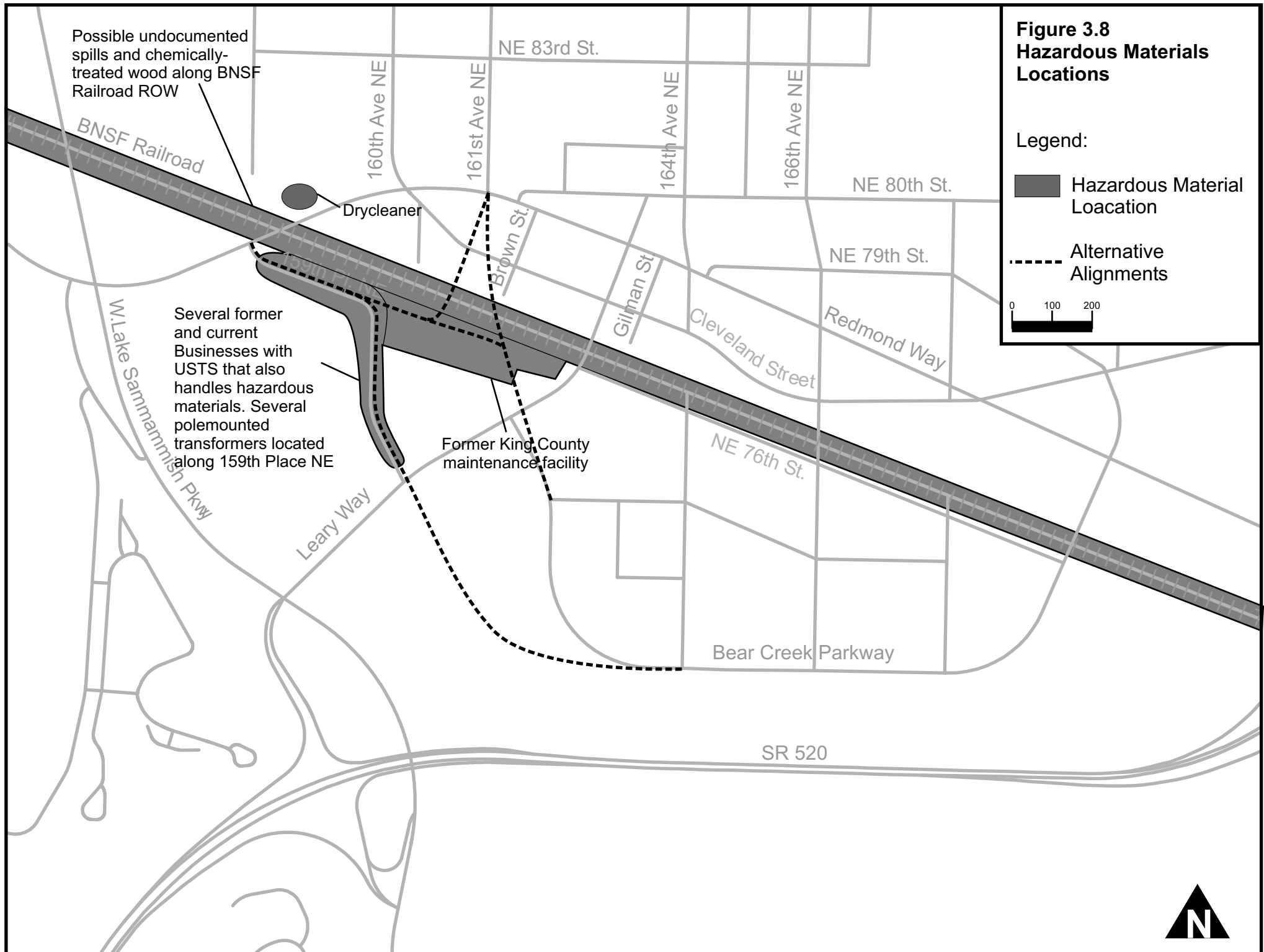
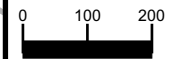
Information from these reports and a field review of existing property uses identified several existing hazardous materials sites located along the proposed alternative alignments (see Figure 3.8).

**Figure 3.8  
Hazardous Materials  
Locations**

**Legend:**

 Hazardous Material Location

 Alternative Alignments



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## ***Affected Environment***

Hazardous materials along the proposed alternative alignments were evaluated by reviewing historic and current site conditions. This review focused on the possible use, generation, storage, release, or disposal of hazardous materials and petroleum products along the proposed alignments.

### **Historic Project Area Conditions**

The Phase I Environmental Assessment (EA) completed in 2001 included a brief historical review of the site vicinity, using existing aerial photography and Sanborn Maps. Aerial photography and Sanborn Maps of the area surrounding the former King County maintenance facility showed that the City of Redmond had a large amount of development at the turn of the century. At that time, much of the area surrounding the former King County maintenance facility was developed with houses, warehouses, offices, general merchandise stores, a hotel, and the railroad tracks located at the same location as they are currently (CDM, 2001).

A former King County maintenance facility is historically one of the largest developments in the project area. Historical sources show a gradual progression of development in the area surrounding this facility from the 1930s through the 1990s. The land use patterns observed surrounding the former maintenance facility are thought to have extended throughout the Bear Creek Parkway Extension's general project area.

#### **Former King County Maintenance Facility**

This site consists of two parcels divided by a City of Redmond street right-of-way (162<sup>nd</sup> Avenue NE). The parcel west of the right-of-way is approximately 100,000 square feet (sq. ft.) and the parcel east of the right-of-way is approximately 30,000 sq. ft. The parcel located to the east of 162<sup>nd</sup> Avenue NE was first developed around 1908 with a residence (CDM, 2001).

The King County Department of Transportation (DOT) Road Services Division initially developed the western parcel in 1926 as a maintenance facility. Buildings on this parcel consist of shops, storage bays, offices, truck sheds, a testing lab, wash rack, storage compound, and trailer. Existing buildings are the original structures from the 1920s and later additions. General site use included routine vehicle and equipment maintenance and fabrication for bridges. King County DOT also had a carpenter shop with metal working equipment and possibly a paint shop on this parcel (CDM, 2001).

The King County Materials Laboratory and Surveyors began occupying the facility immediately after the Road Services Division left the facility in the mid-1960s. The Materials Laboratory left in 1994, and the Surveyors also no longer occupy the site. King County Animal Control has occupied a small office in one building for numerous years. The King County Sheriff Department has also used several bays in two buildings for shop area and storage for several years. The King County Office of Civil Defense also reportedly used some bays for storage (CDM, 2001).

Based on the former King County maintenance facility's historic land use and expected hazardous materials handled on the parcels, Farallon performed a subsurface investigation of the site in 2002. The goal was to characterize the soil and groundwater conditions at the property and evaluate the costs associated with site remediation.

Camp Dresser & McKee, Inc. (CDM)'s Phase II EA (2002) and the Farallon Subsurface Investigation (2002) identified several areas of existing hazardous materials located at the former King County maintenance facility. Hazardous materials were identified in soil and groundwater at multiple locations at the approximately three-acre site.

Through analysis of soil and groundwater samples collected during subsurface investigations, it was determined that the constituents of concern existed at levels exceeding their applicable cleanup levels in the media of concern. The constituents of concern for on-site soil are total petroleum hydrocarbons (TPH) as diesel-range organics (DRO) and oil-range organics (ORO), and tetrachloroethene (PCE) detected in site groundwater. For additional information on specific concentrations and Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) cleanup level exceedences, please see the Farallon Subsurface Investigation.

### **Regulatory Database Review**

From federal, state, and local databases in accordance with (at a minimum) current ASTM Practice E 1527-00 standards (CDM, 2001), sites that generate, transport, store, or dispose of hazardous materials, or that have known or potentially identified contamination with the potential to adversely impact the property were identified. CDM used Environmental Data Resources, Inc. (EDR) to research federal, state, and local databases. The search radius for database listings for the CDM Phase I EA (CDM, 2001) centered on the former King County maintenance facility. The search radius for the EDR database report was reanalyzed to identify additional listed sites within federal, state, and local databases for the Bear Creek Parkway Extension.

The following sites were identified in the EDR database report (CDM, 2001). These former and current sites pose potential hazardous materials concerns in the project area because of their history of handling hazardous materials on site and their proximity to one or more of the proposed project alignments.

### **Cleaning Center of Redmond**

Cleaning Center of Redmond (located at 15820 Redmond Way) is a dry cleaner that generates between 1,500 and 3,000 pounds of PCE-contaminated wastes (i.e., waste carbon filters and sludges) as is typical of dry cleaners. The EDR Report used in the CDM Phase I EA indicated that soil and or groundwater contamination has been identified at the site, and that the site has a ranking of 3. This ranking indicates a moderate risk to human health and the environment (CDM, 2001).

### **Businesses Located Along 159<sup>th</sup> Place NE**

The following businesses along 159<sup>th</sup> Place NE have handled small quantities of hazardous materials as a normal practice for the type of service they provide, but have not had a reported environmental violation (CDM, 2001):

- JM Ney Company (7680 159<sup>th</sup> Place NE)
- Accurate Auto Body (7662 159<sup>th</sup> Place NE)
- Sterling Auto Body Paint Inc. (7520 159<sup>th</sup> Place NE)
- Queen City Auto Rebuild Inc. (7502 159<sup>th</sup> Place NE)
- Creative Color Service Corporation (7495 159<sup>th</sup> Place NE)
- Cirtec Corporation (7841 159<sup>th</sup> Place NE)
- Creative Label (7829 159<sup>th</sup> Place NE)
- Eastside Import Auto Rebuild (7927 159<sup>th</sup> Place NE)
- Redmond AAA Radiator Inc. (7740 159<sup>th</sup> Place NE)

A&G Leasing (7740 159<sup>th</sup> Place NE) and Jackpot Country Store #304 (7725 159<sup>th</sup> Place NE) both removed underground storage tanks (USTs) from their properties without a reported spill or environmental violation. Vintage Racing Motors Inc. of Redmond (7509 159<sup>th</sup> Place NE) is listed in the EDR Report (CDM, 2001) as a small-quantity generator of hazardous materials, and has an underground storage tank (UST) registered with the State of Washington. No violations were reported for the Vintage Racing Motors site, but the status of the UST on site was not reported to the State at the time of the CDM Phase I EA.

### **Sammamish Waterways Condominium Complex**

The Sammamish Waterways Condominium Complex (15858 Leary Way) submitted a Final Cleanup Report to the Department of Ecology in 1994 for a cleanup of TPH-contaminated soil. The area of contamination has reportedly been cleaned up. However, due to the proximity of one or more of the project alternative alignments passing on or adjacent to this spill, this site poses a hazardous materials concern.

### **Current Project Area Conditions**

Hazardous material contamination of soil and groundwater has been characterized at the former King County maintenance facility. For additional information on the specific contamination levels and precise location of samples collected, please see the Fallon Subsurface Report (2002).

It has not been confirmed whether the PCE contamination from the Cleaning Center of Redmond has impacted the project area. Due to this site's proximity to one or more of the project alternative alignments and the reported soil and groundwater contamination at the site, PCE contamination may potentially impact the project area.

Hazardous materials concerns related to commercial development in the project area, primarily along 159<sup>th</sup> Place NE, include the potential presence of underground or aboveground storage tanks (USTs or ASTs). Although several USTs have been removed from the area, it is likely that undocumented USTs or (ASTs, and possibly other contained hazardous materials, are present at other properties throughout the project area. Other hazardous material concerns include the potential presence of asbestos-containing materials (ACM) and lead-based paint within structures planned for demolition.

Pole-mounted transformers are located on electrical transmission poles that run primarily along both sides of 159<sup>th</sup> Place NE. The possible presence of PCBs in the transformers was not evaluated in any of the previous studies. It is not known whether utility lines (e.g., a buried natural gas pipeline) are located in the project area. If it is determined that PCBs are located within project area transformers or a gas line is located within a proposed alignment, the service owners should be contacted to determine the presence of hazardous materials.

Former Burlington Northern Santa Fe (BNSF) Railroad lines run east and west, passing through the center of the project area. Due to the history of hazardous materials being hauled across railroad lines, the possibility of undocumented spills and chemically treated wood used for railroad ties, potential soil and/or groundwater contamination may exist within the former BNSF right-of-way as a result of on-site activities and/or the adjacent former King County maintenance facility.

## ***Environmental Impacts***

### **No Action Alternative**

The Bear Creek Parkway Extension would not be constructed under this alternative. The existing hazardous materials identified in the project area would remain at their current location and status. Adverse impacts related to hazardous materials resulting from the Bear Creek Parkway Extension and the surrounding streets are described in the following *Impacts Common to All Build Alternatives* section.

### **Impacts Common to All Build Alternatives**

Potential hazardous material impacts of the build alternatives are those that result in an adverse impact to human health and the environment. A potential beneficial impact of development is the removal of hazardous materials that may exist within the proposed alignments. This would reduce future adverse impacts on human health and the environment.

The presence of contained hazardous materials, including petroleum products in USTs, ASTs, pole-mounted electrical transformers, potential utility corridors, and other containers at the site, could impact human health and the environment if not mitigated. Workers could be exposed to these materials during construction. Construction activities such as grading in the vicinity of these materials could release contaminants to soil, groundwater, and surface water.

Demolition, removal, and disposal of existing structures during planned construction could release hazardous materials. Asbestos (commonly used in construction for its insulation, fire proofing, and sound proofing qualities) causes cancer and other respiratory problems. Asbestos is most dangerous when crushed, broken, or otherwise disturbed so that fibers are released to the air and inhaled. Lead is often found in lead pipes, copper pipes with lead solder, and interior and exterior painted wood, siding, window frames, and plaster, and can result in lead poisoning if handled inappropriately (inhaled or ingested) during demolition.

The City of Redmond is currently planning to demolish the structures on the former King County maintenance facility parcel. This demolition is anticipated to occur prior to construction of the Bear Creek Parkway extension. Therefore, the impacts described below for each of the proposed alternatives assume prior removal of the structures. However, for any of the alternatives affecting this parcel, a Site Remediation Plan will be developed and implemented to identify, contain, and remove any contaminated materials prior to construction of the new roadway.

### **Alternative 1**

The new alignment of 159<sup>th</sup> Place NE would be the main hazardous material impact of Alternative 1. Several businesses (mainly related to automotive services) have been located along this street. Many of these businesses have not had environmental violations in the past; but hazardous materials have been handled, generated, and contained in USTs at a high percentage of the properties along 159<sup>th</sup> Place NE. Because Alternative 1 would shift the alignment of 159<sup>th</sup> Place NE to the west within the current properties lines of these businesses, it is likely that areas of contamination would be encountered along 159<sup>th</sup> Place NE.

The northern terminus of the Alternative 1 alignment would be within 100 feet of the Cleaning Center of Redmond site, where PCE contamination has been identified. This alignment also passes through a small portion of the Sammamish Waterways Condominium Complex property, where TPH contamination was reportedly cleaned up but may still be impacted south of the Sammamish River.

Four commercial structures (which could contain lead and asbestos) are within the realigned section of 159<sup>th</sup> Place NE of Alternative 1: A&G Leasing, Redmond Carpet, the former Country Store and Service Station, and Able Safety Clean. Impacts during construction would be related to the potential presence of contained hazardous materials; the demolition, removal, and disposal of commercial structures; and potential soil and groundwater contamination.

Impacts may also occur from the potential presence of PCE contamination in several pole-mounted transformers along 159<sup>th</sup> Place NE.

## **Alternative 2**

The former King County maintenance facility is the main hazardous material impact of the Alternative 2 alignment. Soil and groundwater contamination has been identified at this property. A Site Remediation Plan would be developed and implemented to identify, contain, and remove contaminated materials prior to construction of the new roadway.

Three additional structures are located within the Alternative 2 alignment and would be demolished: A&G Leasing, Redmond Carpet, and the Workshop Tavern. Two of these three sites (A&G Leasing and Redmond Carpet) are located along 159<sup>th</sup> Place NE (see Alternative 1).

The northern terminus of the Alternative 2 alignment would be within 100 feet of the Cleaning Center of Redmond site where PCE contamination has been identified. Impacts during construction would relate to the potential presence of contained hazardous materials; the demolition, removal, and disposal of commercial structures; and potential soil and groundwater contamination.

Impacts may also occur from the potential presence of PCE contamination in several pole-mounted transformers along 159<sup>th</sup> Place NE.

## **Alternative 3**

The former King County maintenance facility is the main hazardous material impact of the Alternative 3 alignment. Soil and groundwater contamination has been identified at this property. A Site Remediation Plan would be developed and implemented to identify, contain, and remove contaminated materials prior to construction.

Four additional structures are located within the Alternative 3 alignment and would be demolished: the Workshop Tavern, the Thrift Store, a storage building located along the railroad right-of-way, and a portion of Redmond Plaza. Impacts during construction would relate to the potential presence of contained hazardous materials; the demolition, removal, and disposal of commercial structures; and potential soil and groundwater contamination.



The Alternative 3 alignment would pass through BNSF Railroad right-of-way. Potential impacts at this location could result from undocumented hazardous material spills, chemically treated wood used for railroad ties, and potential soil and/or groundwater contamination.

Impacts may also occur from the potential presence of PCE contamination in pole-mounted transformers along this alignment.

#### **Alternative 4**

The former King County maintenance facility is the main hazardous material impact of the Alternative 4 alignment. Soil and groundwater contamination has been identified at this property. A Site Remediation Plan would be developed and implemented to identify, contain, and remove contaminated materials prior to construction.

Six additional structures are located within the Alternative 4 alignment and would be demolished. Two of these sites (A&G Leasing and Redmond Carpet) are located along 159<sup>th</sup> Place NE (see Alternative 1). The other four sites that would be demolished are: the Workshop Tavern, the Thrift Store, a storage building located along the railroad right-of-way, and a portion of Redmond Plaza.

The northern terminus of the alignment would be within 100 feet of the Cleaning Center of Redmond site where PCE contamination has been identified. Impacts during construction would relate to the potential presence of contained hazardous materials; the demolition, removal, and disposal of commercial structures; and potential soil and groundwater contamination.

The Alternative 4 alignment passes through BNSF Railroad right-of-way. Potential impacts at this location could result from undocumented hazardous material spills, chemically treated wood used for railroad ties, and potential soil and/or groundwater contamination.

Impacts may also occur from the potential presence of PCE contamination in several pole-mounted transformers along 159<sup>th</sup> Place NE.

#### ***Mitigation Measures***

Hazardous material impacts related to site development are regulated by federal, state, and local agencies, including the Environmental Protection Agency (EPA), Ecology, Washington Department of Labor and Industries (L&I), Puget Sound Clean Air Agency (PSCAA), and King County. Many regulations exist that govern petroleum products and other toxic materials including asbestos, lead, and PCBs.

Because contaminants have previously been characterized at the former King County maintenance facility (Fallon, 2002), site remediation of contaminated soil and groundwater would be required prior to construction activities. It is possible that higher levels of contaminated material may exist in areas previously characterized. It is also possible that areas that have not been characterized for the presence of contaminated materials (e.g., under site structures) may also have contaminated material that would need to be removed prior to construction.

As discussed in the Fallon Subsurface Report (2002), Ecology may require groundwater monitoring for halogenated volatile organic compounds (HVOCs) and for the natural attenuation of HVOCs in areas of identified contamination. Monitoring may also be required to assess the potential for off-site migration of contaminated groundwater at the former King County maintenance facility.

It is recommended that the portion of the BNSF right-of-way that may impact the project area and adjacent properties (including the former King County maintenance facility) be assessed for potential soil and groundwater contamination resulting from railroad operations. If contamination is identified, the impact would be mitigated by remediation in accordance with the Department of Ecology Model Toxics Control Act (MTCA).

Similar recommendations are given for the Redmond Cleaning Center dry cleaners along the impacted area of 159<sup>th</sup> Place NE, and the area nearest the Sammamish Waterways Condominium Complex. These recommendations also apply to all other areas where construction of new right-of-way occurs when soil and groundwater contamination has not yet been characterized or where contamination cannot be accurately estimated based on existing data for that area.

Potential impacts related to contained hazardous materials contained in USTs and ASTs would be mitigated by identification, removal, and proper disposal as necessary. It is possible that areas of soil and groundwater contamination may exist near former or current USTs or ASTs and other contained hazardous materials along the proposed project alignments. Residential heating oil USTs (less than 1,100-gallon capacity) are exempt from state regulation, but the King County Fire Marshal requires that USTs no longer in use be emptied and abandoned in-place or removed after obtaining the required permits. For the purpose of this project, the impacted USTs should be removed. If a product release is confirmed during removal, the release would be regulated by MTCA.

The potential hazardous material-related impacts of potential underground utility vaults would be mitigated by proper management by all utility companies affected.

Several pole-mounted electrical transformers in the project area would likely be removed and possibly relocated during construction. These transformers may contain PCBs. The potential hazardous material-related impact would be mitigated by proper management by the electrical utility.

A pre-demolition asbestos and lead survey of structures would be conducted by a qualified inspector prior to demolition. If regulated amounts of asbestos and lead are identified, removal would proceed by a qualified contractor using air quality monitoring to ensure worker safety. Disposal of these materials would proceed in accordance with applicable regulations.

Pollutants that are either dissolved or carried by runoff from pollution-generating impervious surfaces will be treated in accordance with the 2001 Washington State Department of Ecology *Stormwater Management Manual for Western Washington*. Runoff water will be treated with a series of biofiltration swales, wet ponds, and/or other methods.

## ***Significant Unavoidable Adverse Impacts***

No significant unavoidable adverse impacts related to hazardous materials are expected.

## **Aesthetics**

This section documents existing visual resources in the project area, identifies the effects on these resources and on views of these resources that would be caused by the alternatives under consideration, and discusses possible mitigation measures to offset these effects. Visual resources may include landforms, water bodies, vegetation, and man-made development (buildings, bridges, parks, gardens). These resources are considered in the context of the project area's overall visual character (i.e., diversity and continuity of visual resources) and visual quality (i.e., vividness and intactness of views).

## ***Affected Environment***

### **Visual Elements**

Downtown Redmond is located near the confluence of the Sammamish River and Bear Creek. Most downtown development is on the valley floor just east of the Sammamish River. Steep slopes rise from the valley floor on the west side of the river. Similar slopes exist on the east side of the valley further from the downtown core. The Sammamish River and Bear Creek have both been artificially channelized within earthen dikes to control meandering and flooding. However, a project is underway to reestablish Bear Creek's natural floodplain of near Downtown Redmond.



**Sammamish River**

The Sammamish River and Bear Creek offer water views, but these are partially channelized, as mentioned previously. Views of these waterways are only visible from short distances. However, the streams also support riparian vegetation, including small trees and shrubs that are visible from further away and create a linear visual element. Leary Way and Redmond Way cross the Sammamish River within the project area.